

10/574214

1AP20 Rec'd PCT/PTO 11 MAR 2006

Michihiro OHNISHI et al.  
Attorney Docket No. 09812.0125

**AMENDMENTS UNDER PCT ARTICLE 19  
(ARTICLE 19 AMENDMENTS)**

International Application No. PCT/JP2004/014536

MAILSTOP PCT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

**REQUEST FOR SUBSTITUTION OF REPLACEMENT SHEETS**

Please substitute the attached replacement sheets 29-34 of the claims containing an English-language translation of the Article 19 Amendments for sheets 29-32 of the claims in the enclosed English-language translation of the as-filed PCT application. It is respectfully requested that the claims in the substitute sheets and amended in the Preliminary Amendment filed herewith be examined during examination of the patent application. Claims 1-15 are currently pending.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW,  
GARRETT & DUNNER, L.L.P.

Dated: March 31, 2006

By: 

David W. Hill  
Reg. No. 28,220

DWH/FPD/alp

ERNEST F. CHAPMAN  
Reg. No. 25,961

## CLAIMS

1. (Amended) A bioassay plate comprising a first substrate and a second substrate stacked together, said first substrate being provided at least with a reaction region for providing a place of an interaction between substances in a liquid phase and also with a first electrode arranged to face said reaction region, and

said second substrate being provided at least with a common second electrode formed to be located oppose said first electrode.

2. (Amended) The bioassay plate according to claim 1, wherein an axis of opposition between said first electrode and said common second electrode is perpendicular to a bottom wall of said reaction region.

3. (Amended) The bioassay plate according to claim 1, wherein a light source is arranged at a position of said first electrode, and a light-receiving portion is arranged at a position of said common second electrode.

4. (Amended) The bioassay plate according to claim 1, wherein a light-receiving portion is arranged at a position of said first electrode, and a light source is arranged at a position of said common second electrode.

5. A method for producing a bioassay plate, which

comprises providing:

a first substrate having a detecting portion provided at least with a reaction region for providing a place of an interaction between substances and also with a first electrode arranged to face said reaction region, and

a second substrate provided at least with a second electrode which permits imposition of an electric field to said reaction region in association with said first electrode; and

stacking these two substrates together such that said first electrode and said second electrode are located opposite each other.

6. The method according to claim 5, wherein a first substrate as defined in claim 5 and a second substrate as defined in claim 5 are stacked together, said first substrate carries thereon an array of plural detecting portions as defined in claim 5, and said second substrate is provided with a common second electrode for establishing a relation of opposing electrodes with first electrodes as defined in claim 5 and arranged in said respective plural detecting portions as a unit.

7. The method according to claim 5, wherein disk-shaped, said first substrate as defined in claim 5 and

said second substrate as defined in claim 5 are stacked together, said first substrate carries thereon plural detecting portions as defined in claim 5 and arranged in a form of radial arrays from a center of said substrate, and said second substrate is provided with a strip-shaped or line-shaped, common second electrode as defined in claim 5 and formed extending over some or all of said detecting portions belonging to one of said radial arrays.

8. The method according to claim 5, wherein disk-shaped, said first substrate as defined in claim 5 and said second substrate as defined in claim 5 are stacked together, said first substrate carries thereon plural detecting portions as defined in claim 5 and arranged in a form of concentric arrays, and said second substrate is provided with a strip-shaped or line-shaped, common second electrode as defined in claim 5 and formed extending over some or all of said detecting portions belonging to one of said concentric arrays.

9. The method according to claim 5, wherein disk-shaped, said first substrate as defined in claim 5 and said second substrate as defined in claim 5 are stacked together, said first substrate carries thereon plural detecting portions as defined in claim 5 and arranged in a form of a spiral array, and said second substrate is

provided with a strip-shaped or line-shaped, common second electrode as defined in claim 5 and formed extending over some or all of said detecting portions belonging to one of spiral array.

10. The method according to claim 5, wherein an axis of opposition between said first electrode and said second electrode is perpendicular to a bottom wall of said reaction region.

11. (Added) The bioassay plate according to claim 1, wherein said first substrate as defined in claim 1 and said second substrate as defined in claim 1 are stacked together, said first substrate carries thereon plural detecting portions, and said second substrate is provided with a common second electrode for establishing a relation of opposing electrodes with first electrodes as defined in claim 1 and arranged in said respective plural detecting portions as a unit.

12. (Added) The bioassay plate according to claim 1, wherein disk-shaped, said first substrate as defined in claim 1 and said second substrate as defined in claim 1 are stacked together, said first substrate carries thereon plural detecting portions arranged in a form of radial arrays from a center of said substrate, and said second substrate is provided with a strip-shaped or line-

shaped, common second electrode as defined in claim 1 and formed extending over some or all of said detecting portions belonging to one of said radial arrays.

13. (Added) The bioassay plate according to claim 1, wherein disk-shaped, said first substrate as defined in claim 1 and said second substrate as defined in claim 1 are stacked together, said first substrate carries thereon plural detecting portions arranged in a form of concentric arrays, and said second substrate is provided with a strip-shaped or line-shaped, said common second electrode as defined in claim 1 and formed extending over some or all of said detecting portions belonging to one of said concentric arrays.

14. (Added) The bioassay plate according to claim 1, wherein disk-shaped, said first substrate as defined in claim 1 and said second substrate as defined in claim 1 are stacked together, said first substrate carries thereon plural detecting portions arranged in a form of a spiral array, and said second substrate is provided with a strip-shaped or line-shaped, said common second electrode as defined in claim 1 and formed extending over some or all of said detecting portions belonging to one spiral array.

15. (Added) The bioassay plate according to claim

1, wherein said first electrode and said common second electrode are electrodes for forming an alternating electric field between said first electrode and said common second electrode.